



**Department of Energy**  
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**MEMORANDUM FOR DISTRIBUTION**

**FROM:**

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OFFICE OF HEALTH, SAFETY AND SECURITY

**SUBJECT:**

Facility Representative Program Performance Indicators Quarterly  
Report, July–September (Third Quarter Calendar Year 2010)

This memorandum summarizes the highlights of the Facility Representative (FR) Program Performance Indicators Quarterly Report covering the period July through September 2010. Data for these indicators are gathered by Field elements quarterly per Department of Energy (DOE) Standard (STD)-1063-2006, *Facility Representatives*, and reported to Headquarters program offices for evaluation and feedback to improve the FR Program.

Highlights from this report are presented below:

**FR Staffing/Qualification/Oversight Data**

DOE was staffed at 182 FR Full Time Equivalents (FTEs) during this reporting period.  
Quarterly data summary:

- 93 percent Fully Qualified (DOE goal is > 80 percent);
- 94 percent Staffing Level (DOE goal is 100 percent);
- 43 percent Time Spent in the Field (DOE goal is > 40 percent); and
- 76 percent Time Spent in Oversight Activities (DOE Goal is > 65 percent).

**FR Program Highlights**

- The Facility Representative Program continued to meet overall goals for qualification and oversight activities.
- During this quarter, DOE-STD-1151-2010, *Facility Representative Functional Area Qualification Standard*, along with the supporting Qualification Card, Gap Qualification Card, and Qualification Standard Reference were issued.

Current FR information and the current and past quarterly performance indicator reports are available at the FR web site at <http://www.hss.energy.gov/deprep/facrep/>. If you have any questions or comments on this report, please contact me at (202) 586-5680, or the DOE FR Program Manager, Earl Hughes, at (202) 586-0065.



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Manager, New Brunswick Laboratory  
Manager, Oak Ridge Office  
Manager, Office of River Protection  
Manager, Pacific Northwest Site Office  
Manager, Pantex Site Office  
Manager, Portsmouth/Paducah Project Office  
Manager, Richland Operations Office  
Manager, Sandia Site Office  
Manager, Savannah River Operations Office  
Manager, Savannah River Site Office (NNSA)  
Manager, Y-12 Site Office

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## Facility Representative Performance Indicators July-September 2010

### OFFICE OF ENVIRONMENTAL MANAGEMENT (EM)

<u>Location*</u>	<u>Staffing Analysis</u>	<u>FTEs</u>	<u>Actual Staffing</u>	<u>% Staffing</u>	<u>Attrition</u>	<u>% Core Qualified</u>	<u>% Fully Qualified</u>	<u>% Field Time **</u>	<u>% Oversight Time ***</u>
CBFO <sup>1</sup>	3	3	2	66	1	100	50	51	74
ID (EM)	12	12	11	92	0	100	100	49	92
OR (EM) <sup>2</sup>	18	17	16	89	0	100	100	47	69
ORP <sup>3</sup>	15	15	12	80	2	100	100	55	76
PPPO	6	6	6	100	0	83	83	38	59
RL <sup>4</sup>	19	19	19	100	0	95	95	43	69
SR	32	32	30	94	0	77	73	34	74
WVDP	2	2	2	100	0	100	50	47	70
<b>EM Totals</b>	<b>107</b>	<b>106</b>	<b>98</b>	<b>92</b>	<b>3</b>	<b>94</b>	<b>82</b>	<b>46</b>	<b>73</b>
<b>DOE GOALS</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>100</b>	<b>-</b>	<b>-</b>	<b>&gt;80</b>	<b>&gt;40</b>	<b>&gt;65</b>

\* Location Key:

CBFO = Carlsbad Field Office  
ID = Idaho Operations Office  
OR = Oak Ridge Office

ORP = Office of River Protection  
PPPO = Portsmouth/Paducah Project Office  
RL = Richland Operations Office

SR = Savannah River Operations Office  
WVDP = West Valley Demonstration Project

\*\* % Field Time :

The number of hours spent in the plant/field divided by the number of available work hours in the quarter. The number of available work hours includes normal scheduled work and overtime, but not leave or special assignments greater than 1 week assigned.

\*\*\* % Oversight Time includes % Field Time

#### Notes:

- 1 One CBFO FR was promoted to Director of Health and Safety at CBFO
- 2 Three Oak Ridge EM FRs were on detail the whole quarter and not counted in the statistics
- 3 One ORP FR transferred to the Los Alamos Site Office and one transferred to another ORP division at the end of the quarter. One ORP FR was detailed all this quarter and is not included in the statistics.
- 4 One FR from RL was on detail the whole quarter and is not counted in the statistics.

#### **EM Facility Representative (FR) Highlights:**

- ID (EM): An FR supported the review of corrective actions for the March 2010 exposure event at the Health Physics Instrumentation Laboratory.
- ID (EM): An FR served as an auditor for an Office of Nuclear Energy Quality Assurance Program audit.
- ID (EM): An FR served on a For Cause review team investigating a series of events arising from contractor attempts to retrieve a degraded plywood waste box. The events resulted in a high airborne radioactivity area and 20 contractor employees with positive indication of radiological uptakes on initial bio-assay samples.
- ID (EM): FRs noted repeat instances of delayed recording of information in operating logbooks regarding significant activities or events.
- ID (EM): An FR noted that a person operating an aerial lift to gain access to a building's roof appeared unfamiliar with the operation of the machine. The FR informed the contractor work supervisor, who had a qualified person operate the aerial lift. Further investigation showed that the person in question was not qualified to operate the aerial lift.
- OR (EM): FRs attending a critique of a glovebox event identified a number of issues with radiological controls, use and maintenance of personnel protective equipment, and occurrence reporting categorization.
- OR (EM): An FR noted personnel on foot approaching operating heavy equipment to talk to the operator. The FR's observations and follow-up resulted in a brief "Safety pause" to address the issue with workers.

## Facility Representative Performance Indicators July-September 2010

### EM Facility Representative (FR) Highlights:

- ORP: An FR identified improper application of the Unreviewed Safety Question (USQ) Process, leading to a Contractor assessment to determine if there are other instances.
- ORP: FRs identified several issues with elevated work, ladders, use of lifts, and fall protection.
- ORP: FRs found issues with planning and execution of High Radiation Area work, and with worker identification and follow-up of the issues for continuous improvement.
- ORP: FRs identified an unqualified person leading a work activity. Contractor management took corrective actions to prevent recurrence.
- ORP: FRs identified improper execution of work instructions which led to immediate contractor management action to correct deficiencies.
- ORP: FRs discovered several instances of contractor stop-work actions that were not entered into corrective action management systems, and thus did not receive causal analysis and follow-up. The FR action led to modified contractor procedures to prevent recurrence.
- ORP: An FR participated in development of the corrective action plan for an external assessment of the Chronic Beryllium Disease Prevention program
- ORP: An FR worked with the contractor to resolve safety basis issues regarding potential over pressurization of safety-significant items.
- RL: An FR identified two instances where work procedures for system breaching into contaminated UO<sub>3</sub> systems did not require the use of respiratory equipment, causing the risk of uptake exposure to Deactivation and Decommissioning (D&D) workers.
- RL: FRs identified safety issues at three facilities related to personnel working off of elevated platforms and the inconsistent use of safety/guard chains at access points leading to the platforms.
- RL: An FR identified rising numbers of leaking cans from CH2M HILL Plateau Remediation Company (CHPRC) generators sent to the Environmental Restoration Disposal Facility. The FR provided feedback to other FRs to perform additional oversight in this area to mitigate water at the generator site.
- RL: An FR proposed that Washington Closure Hanford LLC (WCH)/Mission Support Alliance, LLC (MSA) determine a formalized risk analysis process for determining whether electrical utilities outages added more risk to overall work scope than is saved by performing an outage. Currently an ad hoc process is used.
- RL: Following a Quality Assurance (QA) issue with super cell liner installation, the FR raised issues that led to more thorough analysis and presentation of data and provided a framework to demonstrate that the overall liner is acceptable.
- RL: An FR brought up issues with the contractor's work control program; electricians were not aware of a secondary power source in an electrical junction box and D&D workers cut into an electrical conduit prior to controls being in place.
- RL: An FR identified numerous issues involving contractor supplied-air breathing protection. The contractor terminated supplied-air work until completing causal analysis and identifying corrective actions.
- SR: A new Qualification Card was developed for the Salt Waste Processing Facility.

## **Facility Representative Performance Indicators July-September 2010**

### **EM Facility Representative (FR) Highlights:**

- SR: One FR completed full qualification and two completed requalification.
- SR: An FR identified that “draft” procedures were used for work.
- SR: An FR identified programmatic issues with an operator training program.
- SR: An FR led an assessment team in verifying the contractor’s Annual Integrated Safety Management System Declaration.
- SR: An FR identified issues with a contractor Heat Stress program that led to complete overhaul of the program.
- WVDP: One FR completed core qualification.
- WVDP: An FR identified the need for a integrated daily summary of planned meetings and events, industrial safety, radiation safety, weather, and project status. In response, the contractor developed the Site Daily Status Cover Sheet to provide this tool.

## Facility Representative Performance Indicators July-September 2010

### OFFICE OF NUCLEAR ENERGY (NE)

<u>Location*</u>	<u>Staffing Analysis</u>	<u>FTEs</u>	<u>Actual Staffing</u>	<u>% Staffing</u>	<u>Attrition</u>	<u>% Core Qualified</u>	<u>% Fully Qualified</u>	<u>% Field Time **</u>	<u>% Oversight Time ***</u>
ID (NE)	9	9	8	89	0	100	100	41	79
<b>NE Totals</b>	<b>9</b>	<b>9</b>	<b>8</b>	<b>89</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>41</b>	<b>79</b>
<b>DOE GOALS</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>100</b>	<b>-</b>	<b>-</b>	<b>&gt;80</b>	<b>&gt;40</b>	<b>&gt;65</b>

\* Location Key:

ID = Idaho Operations Office

\*\* % Field Time :

The number of hours spent in the plant/field divided by the number of available work hours in the quarter. The number of available work hours includes normal scheduled work and overtime, but not leave or special assignments greater than 1 week assigned.

\*\*\* % Oversight Time includes % Field Time

### NE Facility Representative (FR) Highlights:

- ID (NE): A NE FR identified significant deficiencies in a lockout/tagout (LO/TO) associated with installation of new equipment for a research project. Deficiencies included inadequate isolation of hazardous energy (no locks), inadequate identification of energy isolation points, application of Danger Tags to non-Idaho National Laboratory (INL) equipment, improper identification of zero energy condition, and work group acceptance of an inadequate LO/TO. The event was later determined to be ORPS reportable.
- ID (NE): During the reporting period NE FRs observed and reported numerous instances involving inadequate hazard identification and mitigation. In several instances workers demonstrated a poor understanding of the requirements by not having the appropriate hazard mitigation in place. In other instances, work was performed as "skill of the craft" without a work order, and hazards were not properly mitigated. In still other cases, work was performed under work orders that clearly specified hazards and their specific mitigation without that mitigation being implemented.
- ID (NE): NE FRs identified and reported one Finding determined to have high safety significance, four Findings determined to have moderate safety significance, and 22 Findings determined to have low safety significance.
- ID (NE): As part of the new DOE-ID oversight model, the NE FRs developed a formal quarterly assessment process that specifically focuses on implementation and effectiveness of the Contractor's Assurance System. This assessment process was experimented in September as work-in-progress with full implementation starting this next quarter.

## Facility Representative Performance Indicators July-September 2010

### NATIONAL NUCLEAR SECURITY ADMINISTRATION (NNSA)

<u>Location*</u>	<u>Staffing Analysis</u>	<u>FTEs</u>	<u>Actual Staffing</u>	<u>% Staffing</u>	<u>Attrition</u>	<u>% Core Qualified</u>	<u>% Fully Qualified</u>	<u>% Field Time **</u>	<u>% Oversight Time ***</u>
LASO <sup>1</sup>	13	13	13	100	0	100	83	51	78
LSO	10	10	6	60	0	100	100	41	72
NSO <sup>2</sup>	7	7	7	100	0	86	86	51	72
PXSO	10	9	9	90	0	100	100	46	73
SRSO	3	3	3	100	0	100	100	48	79
SSO	8	8	8	100	0	88	88	39	74
YSO	12	11	10	83	0	100	100	49	78
<b>NNSA Totals</b>	<b>63</b>	<b>61</b>	<b>56</b>	<b>90</b>	<b>0</b>	<b>96</b>	<b>96</b>	<b>46</b>	<b>75</b>
<b>DOE GOALS</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>100</b>	<b>-</b>	<b>-</b>	<b>&gt;80</b>	<b>&gt;40</b>	<b>&gt;65</b>

\* Location Key:

LASO = Los Alamos Site Office  
LSO = Livermore Site Office

NSO = Nevada Site Office  
PXSO = Pantex Site Office

SRSO = Savannah River Site Office  
SSO = Sandia Site Office

YSO = Y-12 Site Office

\*\* % Field Time :

The number of hours spent in the plant/field divided by the number of available work hours in the quarter. The number of available work hours includes normal scheduled work and overtime, but not leave or special assignments greater than 1 week assigned.

\*\*\* % Oversight Time includes % Field Time

Notes:

- 1 One FR joined LASO September 26 from the closing Yucca Mountain office; Not included in statistics.
- 2 The previous 0.5 FTE matrixed support at NSO ended and the vacant Group Leader position was filled by an Acting Group Leader

#### **NNSA Facility Representative (FR) Highlights:**

- LASO: An FR identified deficiencies concerning implementation of a design feature, in-service inspection requirement for transuranic waste drums, which resulted in facility declaring a Technical Safety Requirement violation.
- LASO: An FR alerted LASO management and Subject Matter Experts to the need to remove 4000 gallons of transuranic/tritiated liquid waste from TA-21-257 to prevent contamination of the environment.
- LASO: An FR discovered that a Radioactive Liquid Waste operator's valve operation error resulted in contamination of 14,000 gallons of clean waste water.
- LASO: An FR identified that the compensatory measures for Conduct of Operations and Conduct of Maintenance were not adequate and had not been implemented.
- LASO: An FR identified the non-performance of the USQ process for a permanent change in a facility diesel fire pump.
- LSO: Three FRs completed 3-year requalification.
- LSO: Two FRs completed cross-qualification on reassigned facilities.
- LSO: An FR identified numerous pressure relief valves with overdue inspection due dates in three separate facilities, indicating a potential site-wide issue.
- LSO: During an on-site inspection of the thermal treatment unit maintenance activity, an FR identified a number of issues including a leaking propane gas line, a broken electrical cord for a blower, and an inadequate flame nozzle support mechanism.

## **Facility Representative Performance Indicators July-September 2010**

### **NNSA Facility Representative (FR) Highlights:**

- LSO: During observations of critiques, FRs identified inadequate implementation of the contractor's critique process. Inadequacies included not having the correct personnel in attendance, conducting the critique one month after the condition was discovered, and not having an authorized Critique Director lead the process.
- NSO: An FR obtained International Facility Management Association (IFMA) Facility Management Professional (FMP) competency/credentials requirements.
- NSO: FRs continued participation in developing the Nevada Governance Model.
- PXSO: FRs supported start up of two nuclear explosive weapon program operations, participating as NNSA Readiness Assessment Team Members.
- SRSO: An FR completed qualification as Senior Technical Safety Manager.
- SRSO: An FR is supporting the Pit Disassembly and Conversion Integrated Project Team by overseeing the contractor's design efforts for robotics systems.
- SSO: One FR completed qualification and one completed requalification.
- SSO: An FR supported removal of 60,000 curies of Obalt-60 from the Gamma Irradiation Facility, including dry and wet loading of transport casks.
- SSO: FRs completed reviews of safety basis updates for two facilities.
- SSO: FRs assessed and verified proper completion of annual safety surveillances at several facilities.
- SSO: An FR identified deficiencies in Hydrogen piping labeling and worked with the Laboratory to resolve the issues.
- YSO: One FR completed Full Qualification.
- YSO: An FR identified inadequate contractor response to out-of-specification (OOS) round sheet readings. The equipment with the OOS readings eventually failed.
- YSO: An FR documented recurring problems with lockout/tagout boundary isolations.



## Facility Representative Performance Indicators July-September 2010

### OFFICE OF SCIENCE (SC)

<u>Location*</u>	<u>Staffing Analysis</u>	<u>FTEs</u>	<u>Actual Staffing</u>	<u>% Staffing</u>	<u>Attrition</u>	<u>% Core Qualified</u>	<u>% Fully Qualified</u>	<u>% Field Time **</u>	<u>% Oversight Time ***</u>
AMES	1	1	1	100	0	100	100	22	80
ASO	5	5	4	80	0	100	100	23	89
BHSO	4	4	4	100	0	100	100	52	75
FSO	2	2	2	100	0	50	50	49	82
NBL	1	1	1	100	0	100	100	31	61
OR (SC)	5	5	5	100	0	100	100	43	76
PNSO	3	3	3	100	0	100	100	43	76
<b>SC Totals</b>	<b>21</b>	<b>21</b>	<b>20</b>	<b>95</b>	<b>0</b>	<b>95</b>	<b>93</b>	<b>38</b>	<b>77</b>
<b>DOE GOALS</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>100</b>	<b>-</b>	<b>-</b>	<b>&gt;80</b>	<b>&gt;40</b>	<b>&gt;65</b>

\* Location Key

AMES=AMES Site Office      BHSO = Brookhaven Site Office      NBL = New Brunswick Laboratory      PNSO = Pacific Northwest Site Office  
ASO = Argonne Site Office      FSO = Fermi Site Office      OR = Oak Ridge Office

\*\* % Field Time :

The number of hours spent in the plant/field divided by the number of available work hours in the quarter. The number of available work hours includes normal scheduled work and overtime, but not leave or special assignments greater than 1 week assigned.

\*\*\* % Oversight Time includes % Field Time

### SC Facility Representative (FR) Highlights:

- AMES: The FR worked with Ames Laboratory and Iowa State University to develop corrective actions plans to address the issues associated with the low fire protection water supply and ensure the protection of the facilities and property stored in the warehouse and reduce the possibility of a catastrophic fire loss.
- BHSO: Several FRs participated in an FR-requested meeting with Brookhaven National Laboratory (BNL) accelerator staff to further improve the BNL accelerator authorization bases.
- BHSO: Several FRs participated with the BNL contractor in the updating of the nanomaterial ESH subject area.
- BHSO: One FR provided oversight to the commissioning, and subsequent CD-4 transition to operations approval, of the Electron Beam Ion Source used as the starting point for various BNL accelerators.
- FSO: FRs participated in the Accelerator Safety order revision.
- NBL: The FR completed all qualification and is Fully Qualified.
- NBL: The FR observed a contractor replacing carpet in the NBL Library without the required NBL ES&H authorization. This led to discussions with NBL management about their work authorization process, and the applicability of 10 CFR 851. Work was eventually stopped by the Laboratory until an appropriate hazard analysis was conducted and required work authorizations were obtained.
- NBL: The FR discovered multiple occurrences of a Laboratory employee leaving an attic catwalk and walking on a non-load-bearing plaster and wire lath ceiling. The event was discussed with NBL Facility Operations Division and was reported as a near-miss through ORPS.
- OR(SC): FRs assessed implementation of aspects of Conduct of Operations at Oak Ridge National Laboratory nuclear facilities and the Spallation Neutron Source.
- PNSO: An FR continued monitoring contractor corrective actions to address weaknesses identified in Lab explosives safety program. Continued FR involvement has kept the contractor focused on addressing the weaknesses in a timely manner.

## **Facility Representative Performance Indicators July-September 2010**

### **SC Facility Representative (FR) Highlights:**

- PNSO: An FR questioned "accept-as-is" disposition of discrepancies found during a hot cell commissioning shield streaming test. The contractor is revising disposition to implement shield fixes.
- PNSO: An FR observed improper management of lead shavings staged for recycling. Numerous bags of shavings were left outside on a loading dock and a few bags had split and spilled lead shavings. The condition was brought to facility management attention and the lead shavings were cleaned up and repackaged into appropriate containers for recycling.
- PNSO: An FR identified over-pressure protection issues with a helium leak test apparatus configuration. A Management Concern occurrence was declared by the contractor and pressure safety issues were resolved.